



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/735,133

12/12/2003

Jianbo Lu

81093041(FGT 1882 PA)

1924

28549 7590 02/01/2007  
ARTZ & ARTZ, P.C.  
28333 TELEGRAPH ROAD, SUITE 250  
SOUTHFIELD, MI 48034

EXAMINER

BEAULIEU, YONEL

ART UNIT

PAPER NUMBER

3661

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
--	-----------	---------------

2 MONTHS

02/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/735,133  
Filing Date: December 12, 2003  
Appellant(s): LU, JIANBO

**MAILED**

**FEB 01 2007**

**GROUP 3600**

---

Angela M. Brunetti  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/07/06 appealing from the Office action  
mailed 06/15/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**Claim Rejections - 35 USC § 102**

*The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:*

*A person shall be entitled to a patent unless –*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*Claims 1 – 5, 7 – 12, 14, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Okamoto (US 4,886,291).*

*Regarding claims 1, 3 – 5, 7 - 12, 14, 15, and 17, Okamoto teaches operating a roll stability control system for an automotive vehicle (figs. 1, 2, and 15) – the vehicle having a front and a rear brake system and a front and a rear active anti-roll bar system (figs. 1-2; note items connected to circuits 16; summary; col. 2, lines 13 – 33; col. 15, line 66 – col. 16, line 15 at least) - comprising: an active anti-roll bar system (300 in fig. 15; col. 3, lines 13 - 16; col. 13, line 45 – col. 14, line 27); a rollover sensing system generating a roll attitude signal indicative of an impending rollover of the vehicle (col. 4, lines 4 – 18 at least); and a controller (100) coupled to the active anti-roll bar system (300; figs. 15-17) and the rollover sensing system, said controller controlling the active anti-roll bar to prevent the vehicle from rolling over in response to the roll attitude signal being between a first and a second threshold and controlling the brake system (by way*

*of item 106) to reduce a rolling moment of the vehicle based on tire force vector (col. 3, lines 54 – col. 4, line 18 at least).*

*Regarding claim 2, Okamoto further teaches controlling the active anti-roll bar system and the brake actuator to prevent the vehicle from rolling over (col. 4, lines 19 – 24 at least).*

### **Allowable Subject Matter**

*Claims 6, 13, 16, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.*

*Claims 19 – 21 are allowed. A statement of reasons supporting the allowable subject matter will be provided responsive to this Office action.*

### **(10) Response to Argument**

Appellant argues that Okamoto ('291) does not disclose a rollover sensing system as claimed. The Examiner respectfully disagrees. Okamoto does teach various sensors which feed controller 100 (fig.2 at least); controller 100, based on sensed steering angle and vehicle speed, orders the system to adopt a hard mode or a soft mode **to prevent vehicular roll or to ensure roll-stability** based upon predetermined threshold value. The Examiner still believes Okamoto's col. 4, lines 4 – 18 at least teaches what is argued.

Art Unit: 3661

Appellant further takes the position that “rollover,” as a general rule, applies to [vehicle’s] tires leaving the road surface. However, the Examiner’s position is such that **sensing vehicular rollover** does not simply entails tires leaving the road surface on which the particular vehicle is driven. It is noted “tire leaving the road surface’ has not been claimed to the extent argued.

Okamoto senses vehicular roll, not just body roll as argued. Assuming Appellant’s assertion is correct (with regard to ‘vehicle tires leaving the road surface,’ Okamoto would still meet such a teaching, i.e., the tires would be considered part of the vehicle when *vehicular* roll is sensed. In that regard, there would be no distinction between what would be claimed and the teaching of the reference.

While roll angle and attitude are claimed and supported by Okamoto (vehicle rolling magnitude based at least on steering angle), **slip angle** has not been claimed and is therefore considered a moot argument.

As to Appellant’s argument with regard to Okamoto not teaching controlling an active anti-roll system, the Examiner respectfully disagrees. Okamoto’s figs. 15 - 17 at least make it plain such a system is disclosed/taught. Okamoto’s system 300 is an anti-roll system that provides for stabilizing the vehicle. Note col. 13, line 45 – col. 14, line 55 at least. Item 106 controls the brakes of the vehicle not the anti-rolling aspect. System 300 does require threshold testing as argued (col. 14, lines 35 – 46).

As to Appellant's hindsight approach, it must be recognized that any judgment on obviousness (or inherency) is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Finally, Appellant argues that the term "tire" is nowhere used in the Okamoto reference. While this may be true, claims are given their broadest reasonable interpretation. Okamoto's wheels inherently include [attached] tires and have damping force acting upon them. The Examiner is not contesting 'tire' and 'wheel' are not interchangeable terms.

For at least the above reasons, it is believed the rejection is proper.

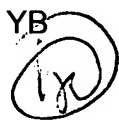
**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


Art Unit: 3661

For the above reasons, it is believed that the rejections should be sustained.

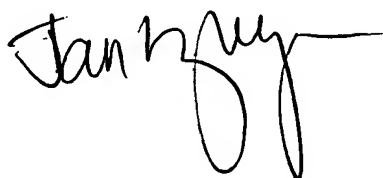
Respectfully submitted,

YB  


Conferees:

TGB 

TN



**TAN Q. NGUYEN  
PRIMARY EXAMINER**